



## Retail Store Car Park LED Upgrade - Case Study

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Leaders in Lighting

### About Our Client

Abacus Lighting supplied main contractor Vinci Construction, with the Orion Pro LEDs for Curry's. The featured Curry's retail store is located in Mansfield. The brand is a prominent electrical retailer in the UK market that specialises in consumer electronics and household appliances.

Over the years, Curry's has built a reputation for providing quality products and exceptional customer service, making it a trusted name in the retail sector.

### The Challenge

Curry's Mansfield had their car park lighting supplied by Abacus several years ago. They wanted to upgrade to energy-efficient LED lights to increase brightness, improve safety, and reduce energy consumption and maintenance costs.

The goal was to enhance the customer experience with a well-lit car park for safe daytime and night-time shopping.

The existing lighting system, although sufficient, did not meet the desired lighting levels for optimal safety and visibility. Curry's aimed to improve the lighting quality in their car park to create a brighter and more secure environment for both customers and staff.



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To View The Case Study Video



### The Solution

Abacus Lighting provided the perfect solution by replacing the old Orion 2 luminaires with the Orion Pro LED through a direct retrofit. The Orion Pro LED achieves a new standard of lighting levels while being significantly more cost-effective and environmentally friendly.

Compared to the older luminaires, the Orion Pro LED offers substantially lower power consumption, resulting in reduced energy bills and a smaller carbon footprint. Additionally, the Orion Pro LED requires less maintenance due to its longer lifespan and greater durability, leading to further cost savings over time. The improved efficiency and reliability of the Orion Pro LED ensures that the car park remains well-lit and secure for customers and staff, thereby enhancing overall safety and convenience.

The Orion Pro LED luminaires provide superior light quality, which improves visibility and enhances the aesthetic appeal of the car park. This upgrade aligns with Curry's' broader sustainability goals and their strategy to implement greener technologies across their operations. The shift to LED lighting also supports Curry's' environmental commitments by significantly reducing greenhouse gas emissions associated with their energy use.



### Conclusion

The successful retrofit by Abacus Lighting demonstrates a forward-thinking approach, leveraging advanced technology to provide tangible benefits in both performance and environmental impact. By upgrading to Orion Pro LED luminaires, Curry's Mansfield has not only improved its operational efficiency and reduced costs but also reinforced its commitment to sustainability and customer satisfaction.

This project serves as a model for other retail locations looking to modernize their infrastructure with eco-friendly and cost-effective solutions.

### Orion Pro Led - The Benefits

**Energy Efficiency:** The new LED lighting system reduces energy consumption by up to 50%, leading to substantial cost savings on electricity bills.

**Lower Maintenance Costs:** With a longer operational lifespan, the Orion Pro requires less frequent replacements and repairs, further reducing maintenance expenses.

**Enhanced Safety:** Consistent and bright lighting improves visibility in the car park, enhancing safety for both customers and staff, and deterring potential security issues.

**Environmental Impact:** The reduced energy consumption translates to a smaller carbon footprint which contributes to Curry's' sustainability targets and environmental stewardship.

**Direct Retrofit:** The Orion Pro LED serves as a direct retrofit to the twin lamp 400W Orion 1, simplifying the upgrade process without the need for significant modifications.

**Versatile Beam Distribution:** The Orion Pro LED is available in 180-degree asymmetrical and 360-degree symmetrical beam distribution options, allowing for tailored lighting solutions to meet specific needs of the car park.

**Meeting The Standards:** Abacus Lighting's specialist lighting design team specified the Orion Pro LED to increase energy efficiency and because the Orion Pro meets the British Safety Standard BS5489 and European Safety Standard BS EN12464-1 for lighting urban centres and public amenity areas.

### Orion Pro Led Suitable For Retro Fitting



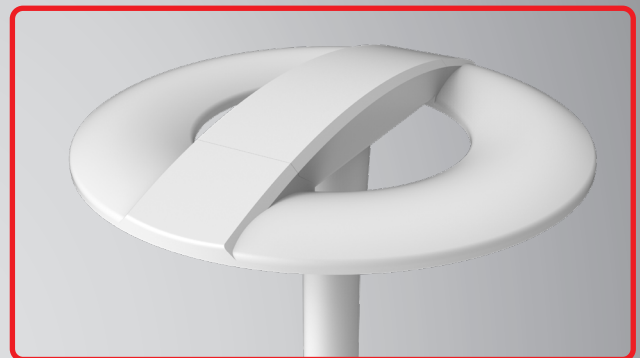
If you need lighting solutions for retail, leisure, or public amenity areas, please contact Abacus Lighting using the options below

# Orion Pro LED - AL4700 Series

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## Orion Pro LED - Key Features

- Direct retrofit to Orion 1 twin lamp 400W
- Available in 180° asymmetrical and 360° symmetrical beam distributions
- 250W symmetrical as standard (Internal drivers)
- 125W asymmetrical as standard (Internal drivers)
- 500W symmetrical option available (Internal drivers)
- Standard working ambient temp. upto 40°C
- 50°C high working ambient temp. option available on request (External drivers)
- Colour temperature 4000K as standard (3000K option available on request)
- Less than 1% upward light
- IP66 and IK10 rated
- 2 Zhaga interfaces for flexibility
- DALI 2 and D4i as standard
- Integrated spigot - 76mm or 89mm shaft compatible
- White polyester powder coated canopy & spigot
- Programmable lumen output to suit designs
- Supplied in recyclable cardboard packaging



## Product Applications

- **Amenity Lighting**
- **Car Parks**
- **Airport Parking**
- **Retail Parks**
- **Railway Stations**
- **Open Area Parks**

## Orion Pro LED Retail & Amenities Light

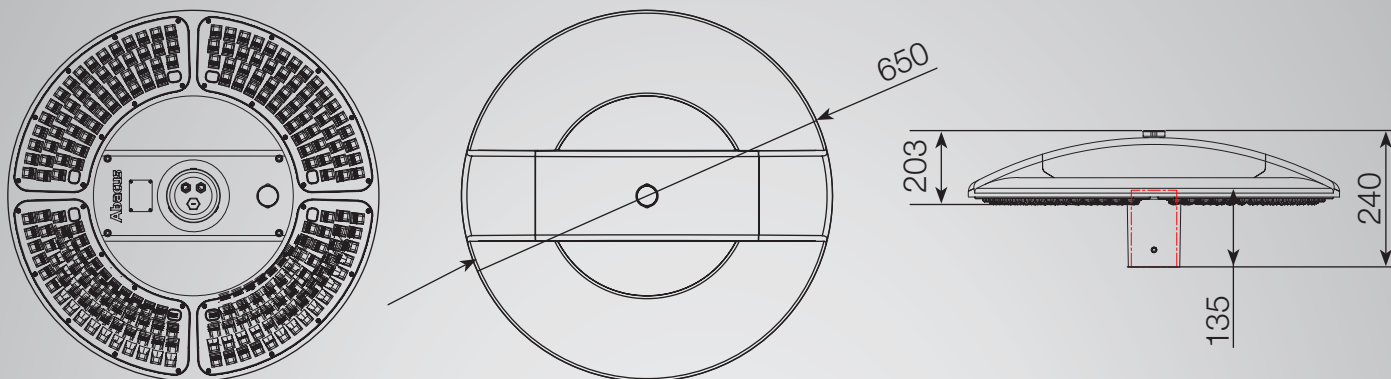
The Abacus Orion Pro LED floodlight stands out as a pioneering lighting solution, delivering efficient and high-quality illumination for a wide range of outdoor spaces. It excels in achieving British standard BS5489 and European standard BS EN12464-1, making it ideal for urban centres & public amenity areas. Thanks to its advanced LED technology, the Orion floodlight not only provides superior brightness but also achieves significant energy savings, contributing to a reduced environmental footprint.

With its high-output 360-degree light distribution and precise optics, the Orion Pro ensures excellent beam control, offering pinpoint lighting precision while minimising light pollution. Overall, the Abacus Orion Pro represents a sustainable and dependable lighting solution that seamlessly integrates performance, durability, and energy efficiency.





### Orion Pro LED Dimensions



### Technical Specification

Technical Specification	125W	250W	500W
<b>Luminous Flux:</b>	20,000 lm	40,000 lm	72,000 lm
<b>Colour Temperature:</b>	4000K (Other options available on request)		
<b>Colour Rendering Index (CRI):</b>	Ra70 (Ra80 optional)		
<b>Body Colour:</b>	White: RAL9003 as standard (Other options available on request)		
<b>Lifetime:</b>	L90B10 > 80,000hrs at 25°C Ambient temperature		
<b>Dimensions:</b>	650mm x 203mm		
<b>Weight:</b>	14.1kg ± 10%		
<b>Working Temperature:</b>	-30°C ~ 40°C (50°C optional)		
<b>IP Rating:</b>	IP66		
<b>IK Rating:</b>	IK10		
<b>Max Spigot Length</b>	135mm		
<b>Spigot Diameter</b>	76mm/89mm		
<b>Wind Area</b>	0.0735m²		

### Spacings & Sample Levels

Height	Spacing (m)	250W 40,000lm		
		Average	Minimum	Uniformity
6m	40	22	7	0.32
	55	11	1	0.09
8m	40	21	11	0.52
	55	11	3	0.27

Height	Spacing (M)	500W 72,000lm		
		Average	Minimum	Uniformity
10m	55	20	9	0.45
	70	13	4	0.31
12m	55	20	11	0.55
	70	13	5	0.38



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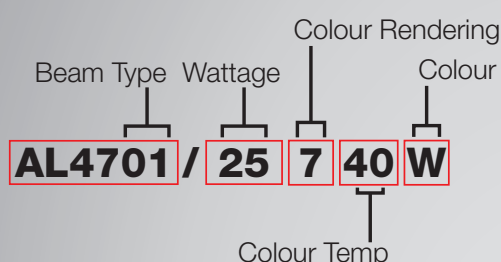
# Orion Pro LED - AL4700 Series

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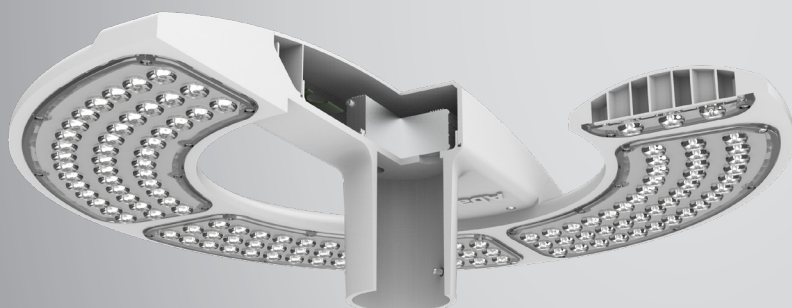
## Product Code Selection

Beam Type & Power	Wattage	Colour Rendering	Colour Temperature	Body Colour
Symmetric = <b>AL4701</b>	125W = <b>12</b> (Asymmetric Only)	Ra70 Standard = <b>7</b>	3000K = <b>30</b>	RAL9003 (White) = <b>W</b>
Asymmetric = <b>AL4702</b>	250W = <b>25</b> (Symmetric Only)	*Ra80 = <b>8</b>	4000K = <b>40</b>	
	500W = <b>50</b> (Symmetric Only)			

## Example Product Selection:

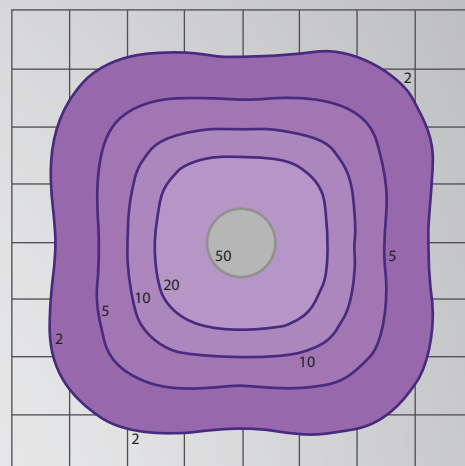


*\*Please contact Abacus for further details on non-standard options, MOQs may apply.*

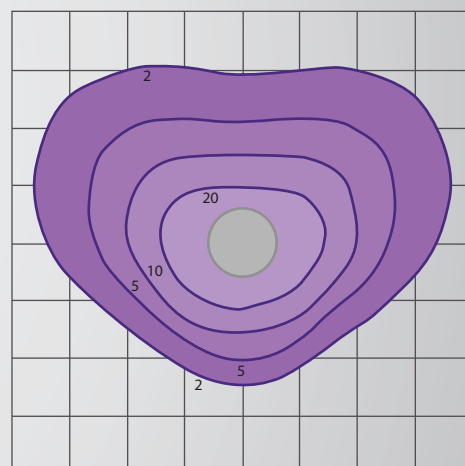


## Light Distribution Photometry

### Symmetrical Distribution AL4701



### Asymmetrical Distribution AL4702



## Orion Pro LED - Typical Column Suitability

- 1.) Static Column \*3 - 12m in height
- 2.) Base Hinge Column \*3 - 12m in height
- 3.) York Hinge Column \*3 - 6m in height

CLICK or SCAN



For More Information

\*The Abacus Lighting columns mentioned above serve as examples for typical installations, but we are not restricted to these options. Abacus Lighting provides a comprehensive range of columns and masts that can accommodate virtually any new or retrofit lighting project.



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